

09/261,081 (Soochoo)



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/261,081 03/02/99 SOOCHOO

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EXAMINER

GOOD JOHNSON, M

ART UNIT

PAPER NUMBER

2672

DATE MAILED:

03/15/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/261,081

Applicant(s)

SOOHOO, KENNETH

Examiner

Motilewa A. Good-Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☐ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other:

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DETAILED ACTION

1. This action is responsive to communications: application, filed on 03/02/1999; IDS, paper #4, filed on 04/21/1999; IDS, paper #5, filed on 09/29/2000; IDS, paper #10, filed on 02/05/2001.

This action is made final.

2. Claims 1-65 are pending in the case. Claims 1, 16, 30, 39, 50 and 56 are independent claims. Claims 3, 4, 20, 21, 30, 44, 45, 53 and 63 have yet been amended.

3. The present title of the application is "Anti-Aliasing System and Method" (as originally filed).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gibson, U.S. Patent Number 5,565, 886, "Method and System for Rapidly Transmitting Multicolor or

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Gray Scale Display Data having Multiple Bits per Pixel to Display Device", class 345/136, 10/15/1996.

As per independent claim 1, **a method of displaying a character . . . comprising: determining a representation of a character in a bit map having a number of bits greater than a number of pixels in a region of a display . . .**; Gibson discloses in col. 3, lines 53-66; **based on a relative number of bits . . . determining luminances for corresponding pixels**; Gibson discloses in col. 2, lines 13-26; **and displaying the character in the region having the particular number of pixels . . .** Gibson discloses in col. 2, lines 27-30.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson in view of Kumazaki et al., U.S. Patent Number 5,555,360.

With respect to dependent claim 2, . . . **determining a representation of the character in a bit map includes generating the bit map based on a vector representation . . .** However, it is noted that Gibson fails to disclose a vector

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representation of the bit map. Kumazaki et al. discloses in col. 2, lines 49-56. It would have been obvious to one of ordinary skill in the art at the time of the invention to include vector representation for output of character and graphics data.

With respect to dependent claims 5-7 respectively, . . . **the number of bits in the bit map is at least twice (four times; ten times) as great as the number of pixels in the region.** Gibson discloses in col. 6, lines 9-14.

With respect to dependent claim 8, . . . **the luminance of a pixel is substantially at a minimum level if substantially all of the bits in the corresponding bit map are on.** Gibson discloses in col. 2, lines 20-27. Kumazaki et al. discloses in col. 1, lines 49-55.

With respect to dependent claim 9, . . . **the luminance of a pixel is substantially at a maximum if substantially all of the bits in the corresponding bit map are off.** Gibson discloses in col. 2, lines 20-27. Kumazaki discloses in col. 1, lines 49-55.

With respect to dependent claim 10, . . . **a respective portion of the bit map includes four sets of 4 bits.** Gibson discloses in col. 2, lines 25-27. It is well known in the art to implement a bit map as four sets of four bits to provide for different intensities or percentages of grayscale. (See Hoddie col. 7, lines 30-34.)

With respect to dependent claim 11, . . . **including counting the number of bits that are on in the four sets of 4 bits.** Gibson discloses in col. 2, lines 45-47.

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With respect to dependent claim 12, . . . **the four sets of four bits comprises four halves of four bytes in a memory.**

With respect to dependent claim 13, . . . **determining luminances comprises: for at least a subset of bits in a respective portion . . . using a table to determine the number of bits on in the subset, and adding the number of bits on for all subsets of bits . . .** It would have been obvious to one of ordinary skill in the art at the time of the invention to include a table for determining bits on in the subset, for it is well known in the art to implement tables for faster rendering and to reduced bandwidth.

With respect to dependent claim 14, . . . **subset of bits comprises a byte.**
Gibson discloses in col. 9, line 7-9.

With respect to dependent claim 15, . . . **subset of bits comprises four sequential bits in a byte.** Gibson discloses in col. 9, lines 13-15.

As per independent claim 16, **a system for display a character . . . comprising: logic that renders a bit map corresponding to a vector representation . . . ; logic that causes the logic that renders to render a bit map . . . ;** Gibson discloses in col. 2, lines 13-26; **logic that . . . determines luminances for corresponding pixels; and logic that causes the character to be displayed in the region . . .** Gibson discloses in col. 2, lines 27-30.

However, it is noted that Gibson fails to disclose a vector representation of the bit map. Kumazaki et al. discloses in col. 2, lines 49-56. It would have been obvious to

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one of ordinary skill in the art at the time of the invention to include vector representation for output of character and graphics data.

With respect to dependent claims 17-19 and 22-23, see above rejection for dependent claims 5-7 and 15 and 13 respectively.

With respect to dependent claims 24-27, . . . **the display comprising a (television; color television; display of hand held device; billboard.)** Gibson discloses in col. 5, lines 18-20, said display device includes a display portion and an interface portion and thus would include televisions, color televisions, hand held devices and billboards.

With respect to dependent claim 28 and 29, . . . **logic for communication with the internet; web browser logic.** Gibson discloses in col. 3, lines 15-22, translation of character bit representation. However, it is noted that Gibson fails to disclose communication with the internet and web browser logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to include logic for communicating with the internet and web browsers to include all character display devices and transporting of characters throughout the displays.

As per independent claim 30 and dependent claims 31-33, they are rejected based upon similar rational as above independent claim 1 and dependent claims 2, 5 and 7 respectively.

With respect to dependent claim 34, . . . **the shape comprises a character.** Gibson discloses in col. 7, lines 53-55.

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With respect to dependent claims 35-38, see above rejection for dependent claims 24-26 and 28 respectively.

As per independent claims 39, 50, and 56 they are rejected based upon similar rational as above independent claim 16 respectively.

With respect to dependent claims 42, 43, and 46-49, they are rejected based upon similar rational as above dependent claims 17, 19, 22-23, 28 and 29 respectively

With respect to dependent claims 40 and 41, . . . **the television signal comprises a (terrestrial television broadcast signal; cable television signal.)** It would have been obvious to one of ordinary skill in the art to display said anti-aliased character on a television comprising differing signals in that the memory of said television display is unaffected.

With respect to dependent claims 51, 52, 54 and 55, they are rejected based upon similar as above dependent claims 5, 6, 28 and 29 respectively.

With respect to dependent claims 57-59, . . . **the attribute comprises (hue; saturation; luminance.)** Gibson discloses in col. 6, lines 1-3.

With respect to dependent claims 60-62 and 64-65, they are rejected based upon similar rational as above dependent claims 5, 6, 24 and 28 respectively.

Response to Amendment

8. Applicant's arguments filed 02/05/2001 have been fully considered but they are not persuasive.

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Applicant argues that Gibson displays characters that have been antialiased and fails to disclose antialiasing of characters. Gibson discloses in col. 3, lines 48-50, the invention is directed to rapidly transmitting multicolor or gray scale display data having multiple bits to a display device. Gibson further discloses in col. 4, line 53, "such as an antialiased character . . ." It is inherent that in displaying a character with more than one illuminative intensity level (see Gibson figure 2B) one would have to determine levels for each intensity level bit.

Applicant further argues that said invention is directed to antialiasing a character. However Applicant claims "a method of displaying a character . . .", which Examiner interprets the invention of Gibson to disclose and based upon character bits to be displayed and further determining a level of intensity for said bit (see Gibson figure 12B).

Applicant argues that the pixel is substantially at a minimum level if the bits are on. Gibson discloses in figure 12A, a character with various levels of intensity relating to bits that are on.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any response to this action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703)-308-9051 (**formal** communications intended for entry),

Or:

(703)-305-9724 (**informal** communications labeled **PROPOSED** or **DRAFT**).

Hand-delivered responses should be brought to:

Sixth Floor Receptionist, Crystal Park II, 2121 Crystal Drive, Arlington, VA.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa Good-Johnson, whose telephone number is

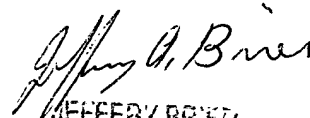
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(703)-305-3939 and can normally be reached Mondays - Fridays from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi, can be reached at (703)-305-4713.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703)-305-4700.

Motilewa Good-Johnson
Patent Examiner
Art Unit 2672


JEFFERY BRIER
PRIMARY EXAMINER